

Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Programs

SWIFT VI Outreach
Tour to
Montana, Wyoming, Colorado

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Department of Homeland Security (DHS)

Vision and Mission

- Our Vision: Preserving our freedoms, protecting America ... we secure our Homeland
- Our Mission: We will lead the unified national effort to secure America.

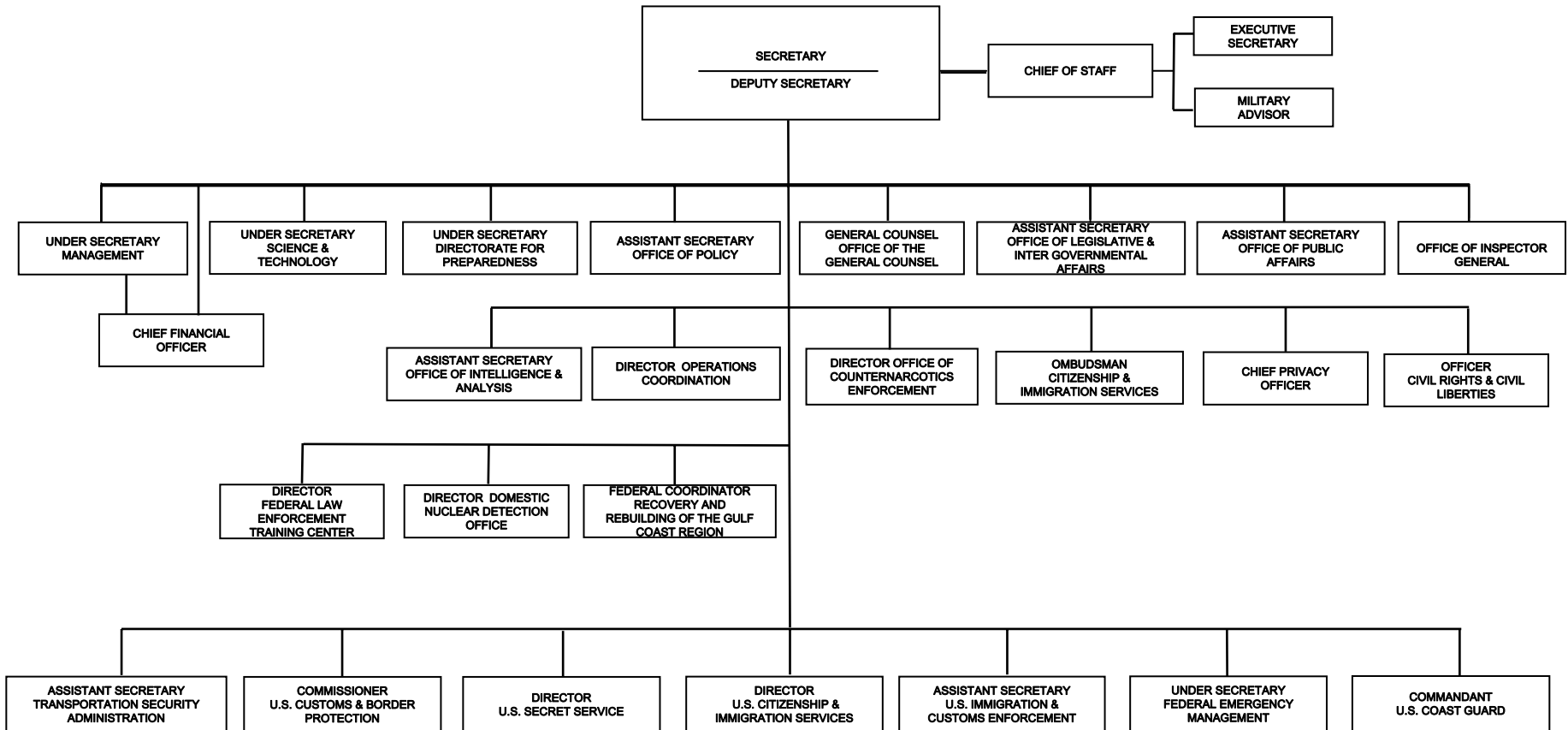
We will prevent and deter terrorist attacks and protect against and respond to threats and hazards to the Nation.

We will ensure safe and secure borders, welcome lawful immigrants and visitors, and promote the free flow of commerce.



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DHS Organization Chart



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07/07/06

DHS Organization

- DHS includes four policy directorates and seven major component agencies:
 - Directorates
 - Policy
 - Preparedness
 - Science & Technology
 - Management
 - Major Component Agencies
 - Transportation Security Administration
 - Customs and Border Protection
 - U.S. Secret Service
 - Citizenship and Immigration Services
 - Immigration and Customs Enforcement
 - Federal Emergency Management Agency (FEMA)
 - U.S. Coast Guard



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Research Areas

- Chemical
- Biological
- Radiological (DNDO*)
- Nuclear (DNDO)
- High Explosives
- Cyber Security
- Emergency Preparedness and Response
- Borders and Transportation Security



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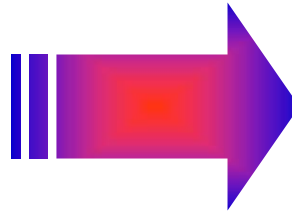
DHS SBIR/STTR Program Strategy

- Engage all programs, projects, and activities
- Design topics with:
 - Medium width topics (not point solutions, not open topics)
 - Near-term commercialization potential
- Award multiple Phase I and II projects
- Reduce or eliminate the gap between Phase I and II
- Provide active involvement to reach Phase III
 - Encourage teaming and collaboration
 - Involve ultimate user



SBIR/STTR Participating Agencies (\$2.5B FY 06)

- DOD SBIR/STTR
- HHS SBIR/STTR
- NASA SBIR/STTR
- DOE SBIR/STTR
- NSF SBIR/STTR
- **DHS SBIR/STTR**
- USDA SBIR
- DOC SBIR
- EPA SBIR
- DOT SBIR
- ED SBIR



FY04 SBIR \$19.6M

FY05 SBIR \$23.0M

FY06 SBIR \$31.6M

FY06 STTR \$ 3.0M



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Small Business Technology Transfer (STTR) Program

- Mandated by Congress (15 U.S.C. 638) through 2009
- Funded by .3% of extramural R&D (>\$1B)
- Small businesses (<500 employees) can participate
 - Must include a U.S. research institution
- Small Business Administration (SBA) guides
- Small business concern must have a not-for-profit partner
- Contract awarded to the small business concern

	Small Business Concern	U.S. Research Institution/ nonprofit
<u>Phase I Work</u> e.g., for \$100K:	minimum 40% \$40K - \$70K	minimum 30% \$30K - \$60K
<u>Phase II Work</u> e.g., for \$750K:	minimum 40% \$300K - \$525K	minimum 30% \$225K - \$450K



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DHS SBIR/STTR Program

- Two solicitations per year
 - Published in Federal Business Opportunities (FedBizOpps) and announced on www.dhssbir.com
 - 30-day posting and 30-day proposal period
 - Historically, approximately six topics per solicitation
- Awards
 - Multiple contract awards based on evaluation, funds available, and programmatic considerations
 - Historically, approximately 30 Phase I projects and 10 Phase II projects per solicitation
- Electronic Processing
 - Proposals submitted/evaluated via Web site
 - Electronic notification of proposal receipt/results
 - Submission of reports via Web site



DHS SBIR/STTR – A Three-Phase Program

	SBIR	STTR
Phase I: Scientific and Technical Feasibility	<i>NTE* 6 months</i> \$100K \$150K for DNDO topics	<i>NTE 6 months</i> \$100K \$150K for DNDO topics
Phase II: Concept Development	<i>NTE 24 months</i> \$750K \$1M for DNDO topics	<i>NTE 24 months</i> \$750K \$1M for DNDO topics
Phase III: Product Development	Private or non-SBIR government funding	Private or non-SBIR government funding



DHS SBIR/STTR Evaluation Criteria

- The soundness, technical merit, and innovation of the proposed approach and its incremental progress toward topic or subtopic solution
- The qualifications of the proposed principal investigators, supporting staff, and consultants (*Qualifications include not only the ability to perform the research and development but also the ability to commercialize the results.*)
- The potential for commercial (government or private sector) application and the benefits expected to accrue from this commercialization

If technical merit is essentially equal, then the tie breaker is cost to the government or length of schedule.



DHS SBIR/STTR Evaluation Process

- Evaluators determine if proposal is appropriate and relevant to the topic area and if the proposed research is unique
- Each proposal evaluated on its merit and relevance to the specific SBIR topic area rather than against other proposals
- Evaluators use a point scoring system
 - Maximum of 20 points or a minimum of zero points, per proposal

	Phase I	Phase II
Criteria 1	10	10
Criteria 2	6	4
Criteria 3	4	6
Total Pts.	20	20



DHS SBIR/STTR Evaluation Process (cont.)

- Evaluators use the following ratings:
 - Highest Priority (20 points) Strongly Recommended for Funding
 - High Priority (18-19 points) Recommended for Funding
 - Priority (16-17 points) Fund Availability
 - Selectable (13-15 points) Fund Availability
 - Not Selectable (0-12 points) Not Recommended for Funding

DHS SBIR/STTR Program Statistics

	FY04 \$19M		FY05 \$23M		FY06 \$34.6M	
Solicitation	4.1	4.2	5.1	5.2	6.1	6.2
Number of Topics	8	6	6	6	10	5-6
1,142 Phase I Submissions	368	157	215	208	194	
204 Phase I Awards	66	31	32	30	45	
45 Phase II Awards	21	13	11	TBD		
Cost Match (Fast Track)	2	1				
Funding Provided to Other Agency Phase II Awards	4		1		3	
Phase III Awards	1		Award Average <div></div>			

Award Average

Phase I: 18 %

Phase II: 35 %



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Jump Start to Phase II

- Only for meritorious Phase I projects with clear potential for Phase II
- Invitation (at the discretion of DHS PM) for Phase II proposal submission before the completion of Phase I
 - Invitation no earlier than 2/3 of period of performance (i.e., not earlier than month 4)
- Invitation basis:
 - Performance toward Phase I technical objectives
 - Monthly and/or final reports
 - Site visits
 - Plans for Phase II
- Phase II proposals evaluated and awarded incrementally

Decreases/eliminates funding gap between phases and accelerates development of technology



Jump Start Statistics

	FY04 \$19M		FY05 \$23M	
Solicitation	4.1	4.2	5.1	5.2
Invited Phase IIs	30	18	15	TBD
Selected Phase IIs	21	13	11	TBD
Pre-Contract Approval	5	5		
Cost Match (Fast Track)	2	1		
Phase III	1			

Jump Start Phase II
Award Average
 71 %

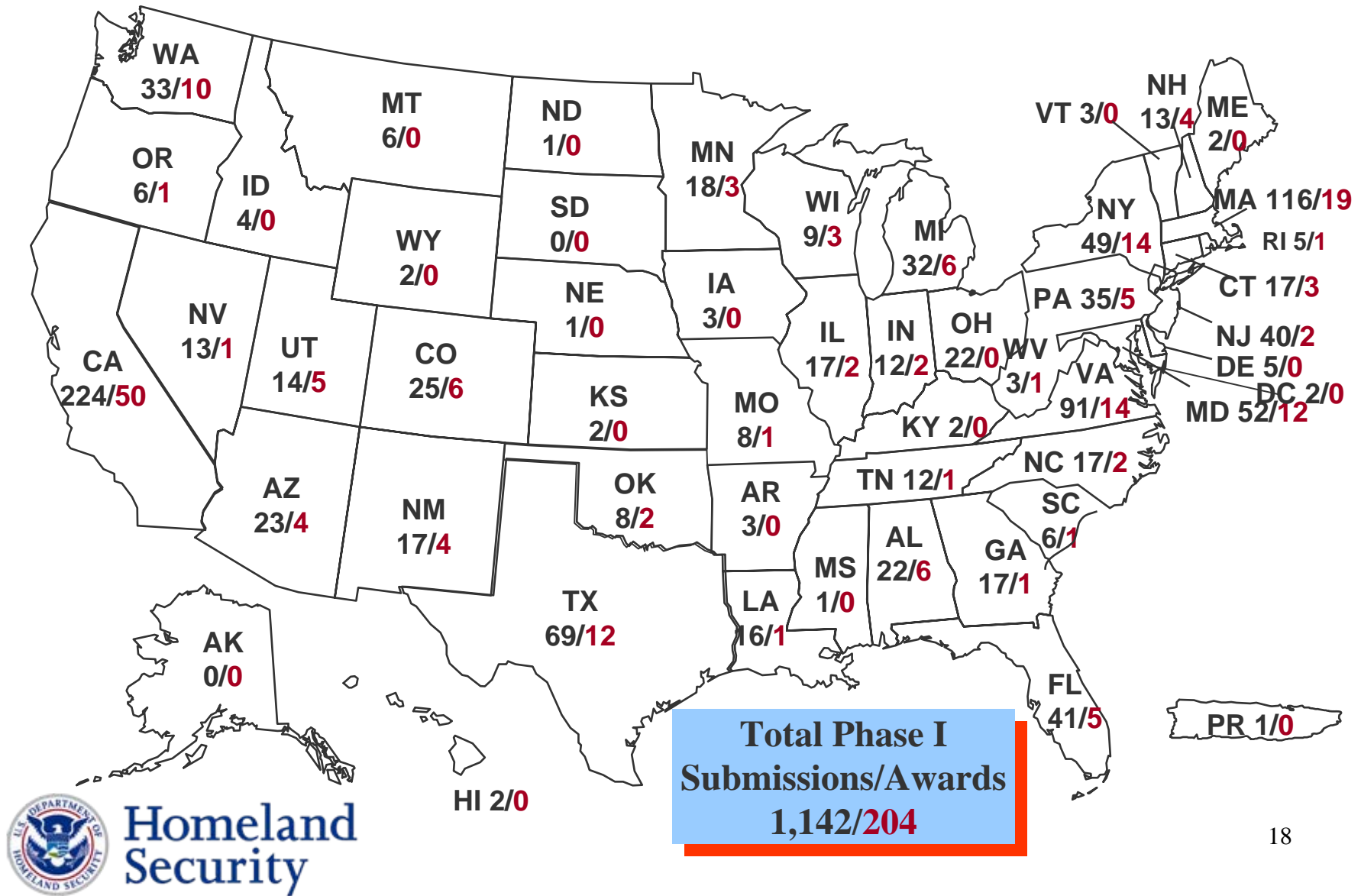


Cost Match (Fast Track)

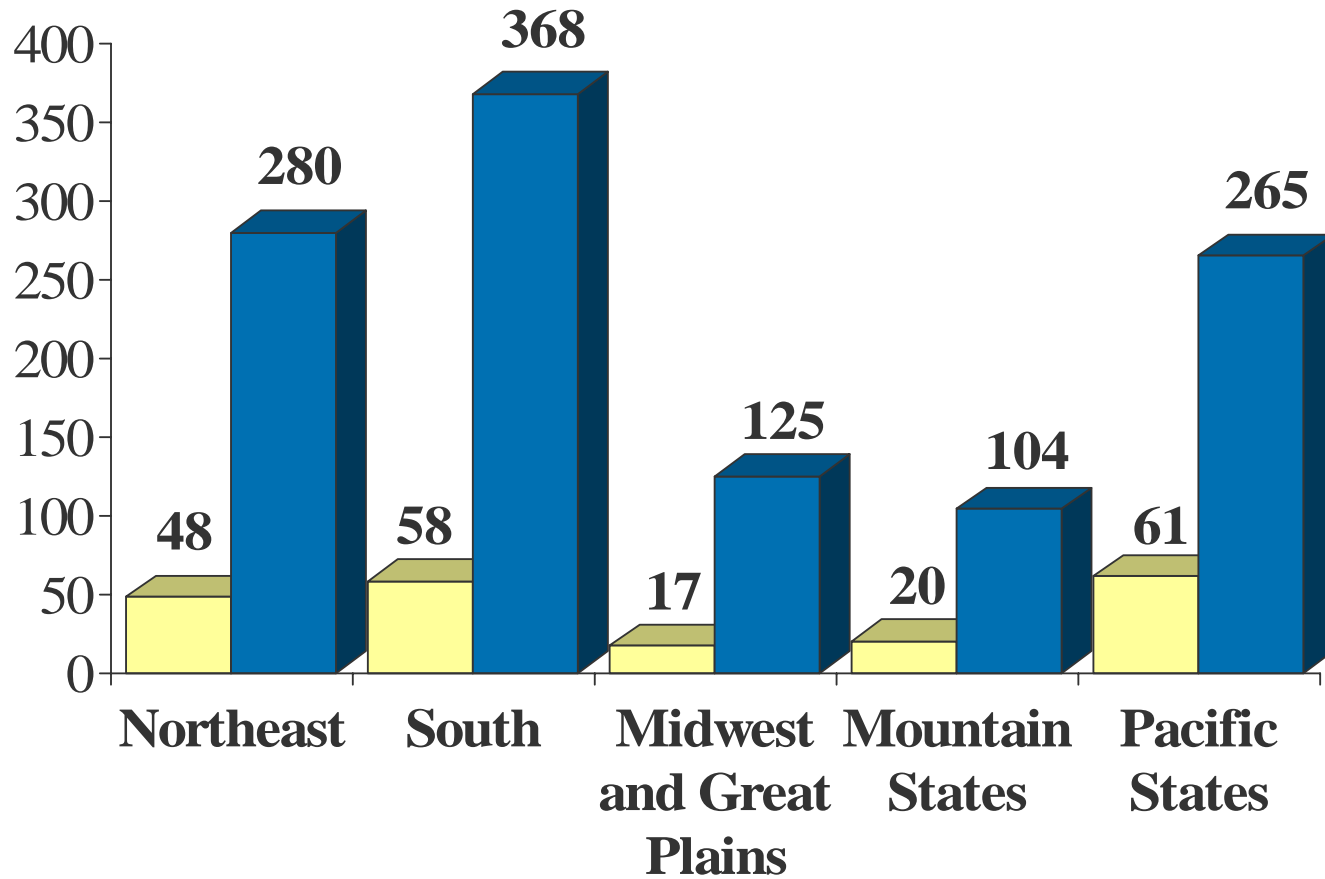
- Allows small businesses to seek additional funding for Phase II projects from non-SBIR sources
- Minimum of \$100,000 to maximum of \$500,000 of outside funding
- Matched by DHS SBIR up to \$250,000 in a 1:2 ratio
- Example: \$500,000 of outside funding may generate an additional \$250,000
 - DHS funding = \$750,000 (Phase II funding) + \$250,000 (matched funds)
 - Outside funding = \$500,000
 - Total project funding = \$1,500,000
- Additional funds require additional scope – need to either add R&D on SBIR contract or other development and commercialization activities (or some of both)
- Cost match is a motivator for, and an indicator of, commercial potential

DHS SBIR/STTR Program: Phase I

5 Competitions (November 2004 - Present)



DHS SBIR/STTR Program: Awards Versus Submissions by U.S. Regions



DHS FY06 SBIR/STTR Program Schedule

- 06.2 (Tentative)
 - Pre-Solicitation posted: Approximately September 8, 2006
 - Proposals accepted: Approximately October 9 – November 9, 2006
 - Contracts awarded: Approximately January 2007

- 06.1
 - Pre-Solicitation posted: February 10, 2006
 - Proposals accepted: March 10, 2006 – April 10, 2006
 - Award notification and contract negotiation: August 2006



DHS SBIR/STTR Program FY06.2 Topics

Coming Soon ...



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DHS SBIR/STTR Program FY06.1 Topics

- Aerosol Collection into Low Analysis Volumes (ACLAV)
- Reliable Peroxide-based Explosives Detection with Low False Alarm Rate
- Enhanced Explosive Sample Collection and/or Pre-Concentration Systems
- Signal Processing for a Southern Border Surveillance System
- Human Detector for Cargo Shipping Containers



DHS SBIR/STTR Program FY06.1 Topics (cont.)

- Instantaneous Remote Sensing Data Receiving and Processing for Emergency Response
- Network-based Boundary Controllers
- BOTNET Detection and Mitigation
- Managing Multi-media Surveillance Information Networks
- Non-nuclear Sources or Techniques to Replace Nuclear Sources in Commercial (Non-medical) Applications (*DNDO topic*)

SBIR Home

What's New

Solicitation Deadlines

SBIR Solicitations

Awards

Proposal/Award Administration

Proposal Review

Reviewer Opportunities

Collaboration Opportunities

SBIR Contact Information

FAQ

Links/Forms

Topic Recommendations

Presentations

Privacy Policy

Homeland Security Advanced Research Projects Agency SBIR/STTR Program

Vision: Make America Safer

The top priority for everything HSARPA does is to enhance the safety and security of America's people, institutions and way of life.

SBIR Program:

The Department of Homeland Security (DHS), Homeland Security Advanced Research Projects Agency (HSARPA) launched the Small Business Innovation Research (SBIR) program, in December 2003. Our goal is to increase the participation of innovative and creative small businesses in Federal Research/Research and Development (R/R&D) programs and challenge industry to bring innovative homeland security solutions to reality.

All Federal agencies with an annual extramural R&D budget exceeding \$100M are required to participate in the SBIR Program. Each fiscal year, not less than 2.5 percent of the annual extramural budget, is reserved for awards to small businesses for R/R&D through a three phase process.

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[DHS SBIR expects to release its 6.2 SBIR Solicitation in August 2006](#)

[DHS announces its 6.1 SBIR/STTR award selections.....](#)



Other Funding Opportunities

Collaboration Opportunities

Topic Recommendations

Using the www.hsarpabaa.com Web Site

HSARPA Solicitation - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites

Address <http://www.hsarpabaa.com/>



Homeland Security Advanced Solicitations and Teaming Portal

- [Home](#)
- [Current Solicitations](#)
 - [SEDBAA06-01 - Emerging Counter-MANPADS Technologies Assessment](#)
 - [BAA 05-03 Prototypes and Technology for Technology for Improvised Explosives Device Detection \(PTIEDD\)](#)
- [Current Workshops & Drafts](#)
- [Past Solicitations](#)
- [Solicitation Awards](#)
 - [RA-03-01 Awards](#)
 - [RA-03-01 Phase II Awards](#)
 - [BAA04-03 Awards](#)
 - [BAA04-05 Awards](#)
 - [BAA04-06 Awards](#)
 - [BAA04-10 Awards](#)
 - [BAA04-14 Awards](#)
 - [BAA04-17 Awards](#)
 - [BAA04-18 Awards](#)
 - [BAA05-01 Awards](#)
 - [BAA05-03 Awards](#)
 - [BAA05-06 Awards](#)
- [Past Workshops](#)

Welcome to the HSARPA Solicitation Portal

Overview:

The Homeland Security Advanced Res on a broad range of topics. These solic section. Within each link, relevant info and white paper/proposal registration a about past Solicitations and Workshop

What's New:

05/22/06	Amendment 2, Addition of Explosives Device Detection
04/04/06	Modification 2, Schedule U Development Program 2 (B

To view and print some of the documents

For any technical

To view and print some of the documents from this site, you may need to download and install the following software:
Hosted by SAI in support of the Homeland Security Advanced

Home

Current Solicitations

- BAA 04-10 Low Vapor Pressure Chemicals Detection Systems (LVPCDS) Program
- BAA 05-03 Prototypes and Technology for Improvised Explosives Device
- BAA 05-06 Food Biological Agent Detection Sensor (FBADS)

Current Workshops & Drafts

Past Solicitations

Solicitation Awards

Past Workshops

HSARPA SBIR Site

HSARPA Mailing List

Privacy Policy

Web Site Technical Help



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Useful Web Sites and Points of Contact for the DHS SBIR/ STTR Program

DHS SBIR/STTR Program Manager:

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Useful Web Sites

- www.dhssbir.com
- www.hsarpabaa.com
- www.dhs.gov



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Key Dates for FY06.2 DHS SBIR/ STTR Program Solicitation

- Pre-Solicitation Posted: Approximately September 8, 2006
- Proposals Accepted: October 9, 2006 – November 9, 2006
- Contract Award: January 2007





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